

APPENDIX D. Painting Material Specifications

APPENDIX ~1. Product Specifications*

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*The Federal Supply Service (FSS) of the General Service Administration (GSA) maintains all Federal paint specifications and standards. FSS/GSA is in the process of reviewing all these documents with the purpose of cancelling documents describing infrequently used items drawn from GSA stock and items that are not stocked by GSA. Many specifications which have value engineering and material data have been cancelled or are in the process of being cancelled. However, these documents are important references since they accurately describe coatings commonly used by military and industrial consumers. These cancelled specifications are prefaced by "C" in the appendices.

TABLE 1. Products for Surface Preparation

Spec no.	Title	Substrate	Use and Remarks
TT-C-490	<p>Cleaning methods and pretreatment of ferrous surfaces for organic coatings. Surface Cleaning Methods: Method I: Mechanical or abrasive cleaning Method II: Solvent cleaning Method III: Hot alkaline cleaning Method IV: Emulsion cleaning Method V: Phosphoric acid Chemical Conversion and Pretreatment Type I: Zinc phosphate Type II: Iron phosphate Type III: Organic pretreatment coating.</p>	Iron, steel	Describes and specifies various cleaning and pretreatment methods for ferrous surfaces.
TT-F-336	Filler, wood, paste	Wood.....	Suitable for filling open grain woods.
TT-F-1098	<p>Filler, solvent, thinned, for porous surfaces (concrete, concrete block, stucco, etc.) (for interior and exterior use) Paint, acrylic emulsion, exterior.....</p>	Concrete, masonry	Fills open pores of surface to produce a relatively smooth surface.
TT-P-19	Paint, polyvinyl acetate, emulsion, exterior	Concrete, masonry	Fill coat described therein fills pores of substrate to produce a relatively smooth surface.
TT-P-55	Primer coating, conditioner for chalking exterior surfaces	Concrete, masonry	Fill coat described therein fills open pores of substrate to produce a relatively smooth surface. Use Type II material only. Conditions prepared chalky painted masonry surface to give good adhesion give good adhesion to subsequently applied paint.

TABLE 1. Products for Surface Preparation--Continued

Spec no.	Title	Substrate	Use and Remarks
TT-R-230	Remover, paint (alkali-type for hot application): Class 1. For ferrous and magnesium metals. Class 2. For aluminum and other nonferrous alloys	Metal	Limited to objects that can be conveniently immersed in a boiling solution.
TT-R-243	Remover, paint (alkali-organic solvent type).	Concrete, masonry, glass, iron, steel	Non-flammable, for removal of multiple coats from ferrous metals, glass, concrete and masonry.
TT-R-251	Remover; paint (organic Solvent type): Type I: Flammable mixture with paintable retardant Type II: Flammable mixture with non-paintable retardant Type III: Non-flammable mixture with paintable retardant Class A: Low viscosity Class B: High viscosity	Concrete, masonry, metal, wood	All types capable of removing air-single coat oleoresinous or alkyd coatings. Type III more satisfactory for baked-in or multiple coat air-dried systems, but may have poor can stability. Type II remover requires solvent cleaning prior to refinishing. Use high viscosity type for vertical surfaces.
MIL-M-10578	Corrosion remover and metal conditioning compound (phosphoric acid base). (Phosphoric acid base): Type I: Wash-off Type II: Wipe-off Type IV: Non-foaming Type V: Immersion tank Sealer, surface, knot	Metal	Used for cold phosphatizing. Type I: Better than II but must be washed off. Type IV: Same as I for use in pressure spray system. Type V: same as I for small items.
MIL-S-12935...	Sealer, surface, knot	Wood	Wood sealer used to prevent resin bleeding.
MIL-P-15328...	Primer, (wash) pretreatment, blue (formula no. 117B for metals).	Metal	Pretreatment designed to improve adhesion to applied coatings except two-component.
MIL-R-46073	Remover, paint, organic solvent type.....	Glass, metal, wood, gypsum board	Non-flammable type.

TABLE 2. Products for Surface Repair

Spec no.	Title	Substrate	Use and Remarks
SS-P-450	Plaster, patching, gypsum (Spackling): Type I: Powder Type II: Paste	Plaster	Type I: for small cracks in plaster. Supplied as a powder to be mixed with water. Type II: for hair cracks and slight imperfections in plaster, tile, or mosaics. Supplied as a paste.
TT-C-598	Calking compound, oil and resin base type (for masonry and other structures): Type I: For gun application Type II: For knife application	Concrete, masonry, glass, metal, wood	For sealing joints in substrates listed or between various combinations.
TT-C-1796	Calking Compounds, metal, seam and wood seam: Type I: Gun application Type II: Knife application Class A: Bulk form Class B: Rubber form	Metal, wood	Class A is used for sealing seams; Class B for sealing joints. Type I is applied by gun; Type II by knife or trowel.
TT-F-340	Filler, wood, plastic	Wood	For filling holes, repairing or joiner work.
TT-G-410	Glazing compound, sash (metal) for back bedding and face glazing (not for channel or stop glazing).	Glass, metal	General use on metal sash glazing. Surface dries but remains slightly soft or rubber underneath for reasonable periods of time.
TT-P-791	Putty; pure-linseed oil type (for wood-sash-glazing): Type I: Whiting putty Type II: White lead-whiting putty	Wood	High grade putty for general use on wood sash glazing. Type I and Type II may be used interchangeably. Type II is harder.

TABLE 2. Products for Surface Repair--Continued

Spec no.	Title	Substrate	Use and Remarks
TT-S-227	Sealing compound: Elastomeric type, multi-component (for calking, sealing, and glazing in buildings and other structures): Type I: Flow, self-leveling Type II: Non-sag	Concrete, masonry, glass, metal, wood	Joint sealing compound for use on all types of structures where some movement is expected and where tightness against dust, dirt, wind, and water is required.
TT-S-230	Sealing compound: Elastomeric Type, Single component (for calking, sealing, and glazing in buildings and other structures): Type I: Flow, self-leveling Type II: Non-sag	Concrete, masonry, glass, metal, wood	Type I: for horizontal joints; Type II: for vertical joints. Similar to Type II of TT-S-227 except one-package.

TABLE 3.1 Interior Products and Uses*

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
TT-C-535	..... Coating, epoxy, two component	Epoxy	Gloss, white and tints	Concrete, metal wood	Extremely washable, resistant to stains and abrasion. Useful to maintenance of sanitary conditions.
TT-C-542	..... Coating, polyurethane, oil free, moisture-curing: Type I: Clear Class 1: Fast dry Class 2: Slow dry Type II: Pigmented	Urethane..	Gloss, white +4 colors	Concrete, metal wood	One component, good resistance to abrasion, acids, alkali, solvents, strong cleaners, fuels and chemicals. Add abrasive chips for skid resistance. Use at least 2 coats.
TT-C-550	..... Coating system, glaze, interior for masonry surfaces	Not specified .	Gloss, white and tints	Concrete, metal, plaster, wood	Smooth tilelike surface; resistant to moisture, abrasion, staining. Low cost substitute for tile.
TT-C-555	..... Coating system, textured (for interior and exterior masonry surfaces	Not specified .	Flat, white and tints	Concrete	Textured finish for application to ceilings in lieu of painting to hide surface irregularities.
TT-E-485	..... Enamel, semigloss, rust-inhibiting: Type II: Brush and Spray Type III: Roller	Alkyd	Semigloss, Olive green and natural	Metal	For sheet metal primarily. Self priming.
TT-E-489	..... Enamel, Alkyd, gloss (for exterior and interior surfaces): Class A: Air Drying	Alkyd	Gloss, all colors	Metal,** wood**	Brush or spray. Primarily for primed smooth metal. Good dry, flexibility, color and gloss retention.

1 See footnotes at end of table.

TABLE 3.1 Interior Products and Uses--Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
TT-E-505	Enamel, odorless, alkyd, interior, high gloss, white and light tints	Alkyd	Gloss	Metal, wood, plaster	Good dry and resistance to water and soap, excellent flexibility and color retention. For walls, ceiling and woodwork in sanitary areas.
TT-E-506	Enamel, alkyd, gloss, tints and whites, (for interior use)	Alkyd	Gloss	Metal, wood, plaster	General use on walls and woodwork. Similar to above but not odorless.
TT-E-508	Enamel, interior, semigloss, tints and white	Alkyd	Semigloss	Metal, wood, plaster	General use on walls and woodwork. Similar performance to TT-E-506.
TT-E-509	Enamel, interior, alkyd, interior semigloss, white and tints	Alkyd	Semigloss	Metal, wood, plaster	General use on walls and woodwork. See TT-E-505.
TT-E-543	Enamel, Odorless, undercoat, tints and white	Alkyd	Flat	Metal, wood, concrete, plaster	Undercoat for gloss and semigloss enamels. Easy brushing, rapid dry, smooth leveling, high opacity.
TT-E-545	Enamel, odorless, alkyd, interior- undercoat, tints and white	Alkyd	Flat	Metal, wood, concrete, Plaster	As above. Both may be sanded for better leveling of topcoat
TT-E-1593	Enamel, silicone alkyd, copolymer, gloss (for exterior and interior use)	Silicone Alkyd	Gloss, white and 19 colors	Metal	Brush, Roll or Spray. Primarily for smooth primed metal. Good dry, flexibility, color and gloss retention.
TT-P-29	Paint, latex base, interior, flat, white and tints	Latex	Flat	Plaster, concrete, wall-board	For walls and ceilings. Primer-sealer and finish coat.

¹ See footnote at end of table.

TABLE 3.1 Interior Products and Uses*--Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
TT-P-30	Paint, alkyd, Odorless, interior, flat, white and tints	Alkyd	Flat	Plaster,** concrete,** wallboard**	For walls and ceilings. Generally good leveling.
TT-P-38	Paint, aluminum, ready-mixed.	Phenolic	Metallic	Metal**	Good water resistance. Can be used to seal wood knots and creosote.
TT-P-95	Paint, rubber: for swimming pools and other concrete and masonry surfaces: Type I: Chlorinated Rubber Type II: Styrene-acrylate	Rubber	White and tints Cl. A: Gloss Cl. B: Semigloss Cl. C: Flat	Concrete, metal, plaster	Self-priming. For swimming pools and moist conditions. For resistance to mild acid and alkali.
TT-P-320	Pigment, aluminum; powder and paste for paint: Type II: Paste Class B: Standard lining				Mixed with varnish to obtain leading aluminum paint.
TT-P-645	Primer, paint, zinc-chromate, alkyd type	Alkyd		Metal	After-pickling coating on steel; primer for steel and aluminum. Yellow color, can be tinted green.
TT-P-650	Primer coating, latex base, interior, white (for gypsum wall-board): Type I: ready mixed Type II: paste	Latex	Semigloss	Plaster, Wallboard	For walls and ceilings of gypsum wallboard with or without taped joints. Paste is thinned with 1 pint of water per gallon.

* See footnotes at end of table.

TABLE 3. Interior Products and Uses*--Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
TT-P-659	..... Primer--coating and sur- facer; synthetic, tints and white (for metal and wood surfaces)	Alkld	Flat	Metal, wood	Rust inhibiting. Use an undercoater for TT-E-489.
TT-P-1511	... Paint, latex-base, gloss and semigloss, flat, white and tints (for interior use)	Latex	Semigloss and gloss.	Plaster, wall- board, wood	For walls and ceilings.
TT-P-1728	... Paint, latex-base, inte- rior, flat, deep tone.	Latex	Flat, deep tones.	Plaster, wall- board	For walls and ceilings.
TT-S-179	..... Sealer, surface: pig- mented oil, plaster and wallboard.	Oleoresinous	White and tints	Plaster, wall- board	Use as primer for TT-E-506, TT-E-508, TT-P-30, TT-P-51.
TT-S-711	..... Stain; oil type, wood, interior	Oil	Transparent, wood colors	Wood	Use on bare wood to change its color or make it uniform.
TT-V-81	..... Varnish: mixing, for aluminum paint: Type II: General Use	Oleoresinous		Metal, concrete, plaster	Use only with aluminum
TT-V-85	..... Varnish, oil, flat, brush or spray	Oleoresinous	Flat, clear	Wood	Dull varnish for use over old varnish or painted surfaces.
TT-V-109	..... Varnish, spar, alkyd-resin	Alkyd	Gloss, clear	Wood	Primarily clear for wood.
TT-V-119	..... Varnish, spar, phenolic resin	Phenolic	Gloss, clear	Wood	Heavy duty, hard drying varnish with excellent water and alkali resistance.

*Also see Tables 9 through 12.

**Primed or previously painted.

***Unpainted or previously painted with cement paint.

Note.--Concrete refers to concrete and masonry.

TABLE 4.¹ Exterior Products and Uses*

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
SS-W-110 ...	Water repellent, colorless, silicone resin base	Silicone	Clear	Concrete, masonry	Reduces water absorption.
TT-C-555 ...	Coating system, textured (for interior and exterior masonry surfaces): Type II: Exterior	Not specified .	Flat	Concrete, masonry	Heavy bodied coating that can hide surface irregularities.
TT-E-489 ...	Enamel, alkyd, gloss (for exterior and interior surfaces): Class A: Air drying	Alkyd	Gloss, white and 41 colors	Metal,** wood**.	Brush or spray. Primarily for smooth metal. Good dry, flexibility; color and gloss retention.
TT-E-490 ...	Enamel, silicone alkyd copolymer, semigloss, exterior.	Silicone-Alkyd	Semigloss, white and 12 colors	Metal**	Brush, roll or spray. Primarily for smooth metal. Excellent weatherability and color and gloss retention.
TT-E-522 ...	Enamel, phenolic, lustreless, outside	Phenolic	Flat, 13 colors	Metal,** Wood**	Humid areas, immersion in fresh or sea water.
TT-E-1593 ..	Enamel, silicone alkyd copolymer, gloss (for exterior and interior use)	Silicone-Alkyd	Gloss, White and 19 colors	Metal**	See notes for TT-E-490.
TT-P-19 ...	Paint, Acrylic Emulsion, exterior	Latex	Flat, white and 24 colors	Concrete, masonry, wood**	Self-priming on concrete. Resistant to chalking and fading.
TT-P-25	Primer coating, exterior (undercoat for wood, ready mixed, white and tints)	Oleoresinous ...	Semigloss, white and tints	Wood	House paint primer.

¹ See footnote at end of table.

TABLE 4.¹ Exterior Products and Uses*--Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
TT-P-37	.... Paint, alkyd resin exterior trim, deep colors	Oil + Alkyd ..	Gloss, 15 colors	Wood**	Trim paint.
TT-P-38	.... Paint, aluminum, ready-mixed	Phenolic	Metallic	Wood, metal	For marine exposure; seal wood knots and creosote surfaces; primer and topcoat for metal. Do not use over 300° F.
TT-P-52	.... Paint, oil (alkyd-oil), wood shakes and rough siding: Type I: White Type II: Light tints Type III: Medium tints Type IV: Mass or deep tones	Oil + alkyd ..	Semigloss II: 1 color III: 9 colors IV: 3 colors	Wood	Thin bodied exterior paint; self-priming.
TT-P-55	.... Paint, Polyvinyl acetate emulsion, exterior Type II: Copolymer.	Latex	Flat, white and tints	Concrete, masonry	Self priming. Resistant to chalking and fading.
TT-P-57	.... Paint, zinc yellow-iron oxide-base, ready-mixed: Type I: Oil+alkyd Type II: Alkyd Type III: Phenolic	See "Title" ...	Semigloss	Iron and steel..	See Chapter 8, Table 16.
TT-P-81	.... Paint oil: ready-mixed exterior, medium shades on a lead-zinc base.	Oil	Oil gloss	Wood, metal	Medium colors and olive drab.
TT-P-86	.... Paint, Red-Lead-Base, ready-mixed: Type I: Oil Type II: Oil+alkyd Type III: Alkyd Type IV: Phenolic	See "Title" ...	Semigloss	Iron and steel..	See Chapter 8, Table 16.

¹ See footnotes at end of table.

TABLE 4.1 Exterior Products and Uses*--Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
TT-P-95	.... Paint, rubber: for swimming pools and other concrete and masonry surfaces: Type I: Chlorinated Rubber Type II: Styrene-acrylate	Rubber base ..	White and tints: Class A: Gloss, Class B: Semi-gloss, Class C: Flat	Concrete, masonry	Self-priming. Primarily for moisture, mild acid and mild alkaline resistance.
TT-P-97	.... Paint, styrene-butadiene solvent type, white (for exterior masonry)	Rubber base ..	Flat, white ...	Concrete, stucco, masonry	Self cleaning. Use two coats on new work, thinning 1st coat. For non-chalking white use TT-P-1181 tint base.
TT-P-102	... Paint, oil, alkyd (modified), exterior, fume resistant, ready-mixed, white and tints	Oil and alkyd .	Oil, gloss, white and tints	Metal,** Wood**	General exterior house paint. Satisfactory for industrial areas.
TT-P-615	... Primer, coating: Basic lead silico chromate, ready-mixed: Type I: Oil Type II: Oil+alykd Type III: Alkyd Type IV: Phenolic Type V: Oil+alykd	See "Title" ...	Semigloss	Iron and steel..	See Chapter 8, Table 16. Type II, III and V can be used as topcoats.
TT-P-620	.. Primer coating, conditioner for chalking exterior surfaces	Oil and alkyd..	White and tints	Masonry	Conditions prepared chalky painted masonry surface to give good adhesion to subsequently applied paint.

*See footnotes at end of table.

TABLE 4.¹ Exterior Products and Uses*--Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
TT-P-641 .	Primer coating: zinc dust-zinc oxide (for galvanized Surfaces): Type I: Oil Type II: Alkyd Type III: Phenolic	See "Title" ...	Flat, gray	Galvanized metal (new or old)	Two component. Can be used as topcoat. Do not use on inside of potable water tanks. See Chapter 8, Table 16.
TT-P-645 ..	Primer, paint, zinc-chromate, alkyd type.	Alkyd	Semigloss, yellow	Metal	For marine service. Undercoat for alkyd enamel. Can be tinted to dark green. See Chapter 8, Table 15.
TT-P-1181 ..	Paint, styrene-acrylate solvent type, tints and deep tones (for exterior masonry): Type I: Tints Type II: Deep tones	Rubber base ..	Flat, tints and colors	Concrete, stucco, masonry	For self-cleaning white use TT-P-97. Use two coats on new work only, thinning 1st coat only.
TT-P-1510 .	Paint, latex, exterior, for wood surfaces, white and tints	Alkyd-latex ...	Flat	Wood	For wood surfaces and previously painted surfaces.
TT-S-176 ..	Sealer, surface, varnish type, floor, wood or cork: Class 1: 40% min. Class 2: 28% min.	Oleoresinous ..	Clear, gloss ...	Plywood	Seal plywood before finishing. Use Class 1 if wood is very porous.
TT-V-81 ...	Varnish; mixing, for aluminum paint: Type I: Flexible Type II: Standard	Oleoresinous ..	Clear	Metal, wood	See TT-P-320. Use Type I for priming wood. Use Type II for metal.
TT-V-119 ..	Varnish, spar, phenolic resin	Phenolic	Gloss, clear ...	Metal, wood	Heavy duty spar varnish.

¹ See footnotes at end of table.

TABLE 4.1 Exterior Products and Uses*--Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
MIL-P-12742	Primer coating, phenolic, water immersible: Type I: For metal Type II: For wood	Phenolic	Semigloss I: Yellow, II: Red or brown	Metal, wood	Primer for phenolic. For high humidity and fresh water immersion.
MIL-P-15328	Primer, (wash) pretreatment, blue (formula 117 for metals)	Vinyl	Translucent	Metal	Pretreatment for metal.
MIL-P-15929	Primer coating, ship-board, vinyl-red-lead	Vinyl	Flat, orange red	Metal	Hot spray over MIL-C-15328. Use vinyl alkyd topcoats below.
MIL-E-15930	Primer coating, ship-board, vinyl-zinc chromate	Vinyl	Flat, yellow	Metal	As above except for anti-corrosive pigment.
MIL-C-22750	Coating, Epoxy, polyamide	Epoxy	Gloss and semi-gloss, white and 7 colors	Metal	Two component for corrosive environments. See MIL-C-22751 for application.
MIL-P-23236	Paint coating systems, steel ship tank, fuel and salt water ballast. Class 3.	Inorganic Zinc	Gray	Metal	Primer-for marine and moderately severe environments
MIL-P-23337	Primer coatings; epoxy polyamide	Epoxy	Yellow	Metal	Primer-for marine and moderately corrosive environments.
MIL-P-26915	Primer coating, zinc dust pigmented for steel surfaces: Type I: Air cure Class A: Ready-mixed Class B: Two component	Organic	Flat, Gray	Steel	For corrosive environments. No topcoat needed in less severe exposure.

* See footnotes at end of table.

TABLE 4.¹ Exterior Products and Uses*---Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
MIL-P-28582	Primer coating, exterior, lead pigment-free (undercoat for wood, ready-mixed, white and tints).	Alkyd		Wood	Primer - for general exterior use. Lead pigment-free.
MIL-P-28641	Primer coating, vinyl chloride copolymer, high-build (for steel and masonry)	Vinyl	White and tints	Metal	Primer-for marine and moderately corrosive environments
MIL-P-28642	Paint (topcoat), vinyl chloride acetate copolymer, high build (for steel and masonry)	Vinyl	White and tints	Metal	Top coat-for marine and moderately corrosive environments.
MIL-P-38336	Primer coating, inorganic zinc dust pigmented, self-curing, for steel surfaces.	Inorganic	Flat, gray	Steel	Two component. For highly corrosive environments. Can apply at high humidity.
MIL-C-38427	Coating kit, topcoat, pigmented, for application over inorganic zinc primer-coated steel surfaces: Type I: Air dry Type II: Moisture cure Type III: Two component Class 1: Urethane Class 2: Epoxy	See "Title" ...	Gloss, green or gray	Steel	For use over MIL-P-38336. Can also be applied at high humidity and under moist conditions. Type I--lowest in cost, easiest to use; Type III most resistant but has limited pot life.
MIL-P-52192	Primer, coating, Epoxy	Epoxy	Semigloss, red or brown	Metal	Two component. Primer for MIL-C-22750.

¹ See footnotes at end of table.

TABLE 4. Exterior Products and Uses*--Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
MIL-P-52324	Paint, oil, alkyd, exterior, white and light tints: Class 1: White Class 2: Tint base	Oil-alkyd	Gloss	Wood,** Metal**.	Blister resistant. Class 2 can be used as non-chalking white, also in hot humid climate.
MIL-E-82401	Enamel, exterior, vinyl-alkyd, red	Vinyl-alkyd ..	Gloss, red	Metal	For marine and moderately severe environments.
VR-3	Vinyl Resin Paint ...	Vinyl	Semigloss, white gray, aluminum	Concrete, steel	Self priming. Use 4 coats, i.e., white, gray, white, aluminum for corrosive environments.
VR-6	Vinyl Resin Paint: (1) Prime coat--gray (2) Bodycoat--iron red (3) Bodycoat--gray (4) Seal coat: (a) Aluminum (b) Gray.	Vinyl	Finish, gray, iron, red, aluminum	Metal	For corrosive environments.

*Also see Tables 13 through 16.

**Primed or previously painted.

***Unpainted or previously painted with cement paint.

****May be used in lieu of MIL-E-24307.

TABLE 5.1¹ Products for Floors*

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
TT-C-542 ..	Coating, polyurethane, oil-free, moisture-curing: Type I: Clear Class 1: Fast dry Class 2: Slow dry Type II: Pigmented	Urethane	Clear, white, and 4 colors	Concrete, metal,** wood	One component, excellent resistance to abrasion, acids, alkali, solvents, strong cleaners, fuels and chemicals. Add abrasive chips for skid-resistance. Use at least 2 coats.
TT-E-485 ..	Enamel, semi-gloss, rust-inhibiting: Type II: Brush and spray. Type III: Roller	Alkyd	Semi-gloss, olive-green and natural	Metal	Self-priming, primarily for smooth metal.
TT-E-487 ..	Enamel, floor and deck	Not specified..	Gloss, 4 colors.	Concrete,** wood	Interior or exterior use for floors not subject to dampness.
TT-P-57 ...	Paint, zinc yellow-iron oxide-base, ready-mixed Type II: Alkyd Type III: Phenolic	Alkyd, phenolic	Semigloss II: Yellow III: Reddish	Steel (unpainted)	Primer, see Table 16, Chapter 8, Type II: General use; Type III: Humid and mildly corrosive environments.
TT-P-86 ...	Paint, red-lead-base, ready-mixed: Type III: Alkyd Type IV: Phenolic	Alkyd, phenolic	Type III: Orange Type IV: Red	Steel (unpainted)	Primer, see TT-P-57 above also Table 16, Chapter 8.
TT-P-91 ...	Paint, rubber-base, for concrete floors	Rubber base ...	Gloss, 8 colors	Concrete	For interior floors subject to dampness and for mild corrosive environments; resistance to cleaners, mild acid and alkali, oil, abrasion.

¹ See footnotes at end of table.

TABLE 5.¹ Products for Floors*--Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
TT-P-615 ...	Primer Coating: Basic lead silico chromate, ready-mixed: Type III: Alkyd Type IV: Phenolic	Alkyd, Phenolic	Orange	Steel (unpainted)	See TT-P-57 above, also Table 16, Chapter 8, good resistance to mild chemical environments.
TT-P-645 ...	Primer, paint, zinc chromate, alkyd type	Alkyd	Yellow	Steel (unpainted)	See Table 16, Chapter 8. For marine, mild corrosive environment.
TT-S-176 ...	Sealer, surface, varnish type, floor, wood, or cork: Class 1: 40% solids Class 2: 28% solids	Phenolic	Clear	Wood (unpainted)	Penetrating sealer, also primer for clear top coats. Class 1: Porous substrate. Class 2: Denser substrate.
TT-V-71 ...	Varnish, interior, floor and trim	Oleoresinous	Clear, gloss ...	Wood	For general use.
TT-V-119 ...	Varnish, spar, phenolic resin	Phenolic	Clear	Wood	For humid, marine and mildly corrosive environments.
DOD-E-698 ..	Enamel, alkyd, deck, black (formula no. 24)	Alkyd+phenolic	Semigloss, black	Steel,** Wood**.	For marine and mildly corrosive environments, for interior and exterior use.
DOD-E-699 ..	Enamel, deck, gray, exterior (formula no. 20): Type I: Smooth	Alkyd phenolic	Semigloss, gray.	Steel,** Wood**.	For marine and mildly corrosive environments, for interior and exterior use.
MIL-W-5044 .	Walkway compound nonslip, and walkway mating, nonslip Type I: Smooth texture Type II: Rough texture	Not specified..	6 colors	Metal**	Provides nonslip surface on interior and exterior walks.

¹ See footnotes at end of table.

TABLE 5. Products for Floors*--Continued

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
DOD-D-18210	Enamel, deck, interior red (formula 23)	Alkyd+phenolic	Red	Steel,** Wood**	For marine and mildly corrosive environments.
DOD-E-18214	Enamel, deck, interior dark green (formula 19)	Alkyd+phenolic	Dark green ...	Steel,** Wood**	For marine and mildly corrosive environments.
MIL-C-81346	Compound, deck covering, nonslip, lightweight, for aluminum alloy landing mats	Not specified..	Green	Aluminum	Nonflaming, interior and exterior use.
SSPC No. 16	Coal tar epoxy polyamide black (or dark red) paint	Coal tar+epoxy.	Black, dark red	Concrete, steel	For corrosive environments; add garnet for nonslip surface. Modeled after C of E Formula C-200.
Maple Floor- ing Mfrs Assoc.	Heavy duty finishes for maple, beech, and birch floors.	Not specified .	Clear, gloss ...	Wood**	For gymnasium floors.

*Also see Tables 17 through 19.

**Primed or previously painted.

TABLE 6. Special Purpose Products and Uses¹

Spec no.	Title	Type	Finish	Sub	Exp	Notes
TT-C-492	Coating, compound paint, antisweat	Not specified	Match standard	A,B,C, M,P	I	Brush or spray; for intermittent condensation only.
TT-C-535	Coating, epoxy, two-component for interior use on metal, wood, wallboard, painted surfaces, concrete and masonry.	Epoxy	Gloss	C,M,W	I	Extremely washable, resistant to stains and abrasion; use to maintain sanitary condition; mix 1 hr. before use.
TT-C-542	Coating, polyurethane, oil-free, moisture curing: Type I: Clear Class I: Fast dry Type II: Pigmented	Urethane	Clear, white and 4 colors, also nonskid	C*,M*,W*	I	One component, excellent resistance to abrasion, acids, alkali, solvents; add abrasive chips for skid resistance; use at least two coats.
TT-C-550	Coating system, glaze interior, for masonry surfaces	Not specified ...	Semigloss, white and tints	C	I	Hard glaze finish resistant to heat, moisture, abrasions and stains; provides tile-like surface.
TT-C-555	Coating system, textured (for interior and exterior surfaces): Type I: Interior Type II: Exterior	Not specified ...	Flat, match standard color	C	I, E	Apply by brush, spray and roller. Use on ceilings and exterior porous wall surfaces.
TT-E-496	Enamel, heat, resisting (400° F) black	Bituminous	Gloss	M		Use where resistance to moderately high temperatures, up to 400° F, is required.

¹ See code at end of table.

TABLE 6. Special Purpose Products and Uses¹---Continued

Spec no.	Title	Type	Finish	Sub	Exp	Notes
TT-E-505	Enamel, odorless, alkyd interior high gloss, white and tints	Alkyd	Gloss, white and tints	P*,W*,WB*	I	Easy brushing, good drying, excellent color retention, good water and soap resistance and excellent flexibility.
TT-E-509	Enamel, odorless, alkyd interior semi-gloss, white and tints	..... do	Semigloss	M*,W*,WB*	I	See above. Use either where odor is a problem, e.g., living quarters, hospital and kitchens.
TT-E-522	Enamel, phenolic, lustreless, outside	Phenolic	Flat, white and 12 colors	M*,W*	E	Use where high humidity conditions exist or for immersion in fresh or salt water.
TT-E-545	Enamel, odorless, alkyd interior undercoat, tints and white	Alkyd	Flat, white and tints	M,W,C,P*	I	Use where odorless solvents are required.
TT-P-19	Paint, acrylic emulsion, exterior	Latex	Flat, white and 24 colors	C	E	Self priming on concrete. Resistant to chalking and fading.
TT-P-26	Paint, interior, white and tints fire retardant	Not specified	Semigloss, white and tints	W,WB	I	Use only on combustible walls, ceiling, woodwork; expensive; use only with prior approval.
TT-P-28	Paint, aluminum, heat resisting (1200° F)	.....	.....	.....	.....	Use to protect steam lines, boilers, super-heaters up to 1200° F.
TT-P-29	Paint, latex-base, interior, flat, white and tints	Latex	Flat	P,W*,WB	I	For general interior use, self priming. For plaster and wallboard.

¹ See code at end of table.

TABLE 6. Special Purpose Products and Uses¹---Continued

Spec no.	Title	Type	Finish	Sub	Exp	Notes
TT-P-30	Paint, alkyd, odorless, interior, flat white and tints.	Alkyd	Flat, white and tints	P,W	I	For interior walls and ceilings. Use where odor is a problem.
TT-P-34	Paint, exterior, fire retardant, white and light tints	Not specified	Semigloss, white and tints	W	E	Use only on exterior combustible material, e.g., new or painted wood; use only with prior approval.
TT-P-38	Paint, aluminum, ready-mixed	Phenolic	Metallic	B,M	I,E	Excellent durability, resistant, non-bleeding.
TT-P-55	Paint, polyvinyl acetate emulsion, exterior: Type I: Copolymer	Latex	Flat, white and tints	C	E	Self priming, resistant to chalking and fading.
TT-P-95	Paint, rubber; for swimming pools and other concrete and masonry surfaces: Type I: Chlorinated rubber Type II: Styrene-acrylate	Rubber base	C1 A--Gloss C1 B --Semigloss, C1 C--Flat, white and tints	C, M*, P	I, E	Fast dry, self-priming; use for wet areas, e.g., swimming pools, reservoirs, water plants, shower rooms, laundries; do not use over other paints.
TT-P-595	Preservative Coating, canvas	Not specified	Four colors	F	I, E	Renders canvas, fire, water, mildew and weather resistant.
TT-P-641	Primer, coating: zinc dust-zinc oxide (for galvanized surfaces): Type I: Oil Type II: Alkyd Type III: Phenolic	See "Title"	Flat, gray	M,C	E	Two component; can be used as topcoat. Do not use on the inside of potable water tanks.

¹ See code at end of table.

TABLE 6. Special Purpose Products and Uses¹--Continued

Spec no.	Title	Type	Finish	Sub	Exp	Notes
TT-P-650	Primer coating, latex base, interior, white (for gypsum wallboard): Type I: Ready-mixed Type II: Paste	Latex	Semigloss	P,WB	I	Primarily for wallboard with or without taped joints. Thin paste with 1 pint of water per gallon.
TT-S-179	Sealer, surface, pigmented oil, plaster and wallboard	Oleoresinous	White and tints	F,P,WB	I	May be used as a primer. Add mildewcide when used on fabric.
TT-W-571	Wood preservation; treating practices	.....	.....	W	E	Covers hot and cold pressure treatment of wood with preservatives; for poles, posts, ties, and lumber exposed to fresh or salt water.
MIL-P-14105 ..	Paint, heat resisting, (for steel surfaces)	Silicone	Low gloss, olive drab	S	E	Frit-silicone coating to protect mufflers, stacks, etc. to weathering and up to 1400° F
MIL-P-15144 ..	Paint, fire-retardant (binder for antisweat coating) (formula no. 34)	Alkyd	Flat, white	M*	I,E	Use with expanded vermiculite (MIL-V-15196) to prevent condensation.
MIL-E-15145 ..	Enamel, zinc dust pigmented, fresh water tank protective (formula no. 102)	Phenolic	Flat, gray	S	I,E	Two component. Corrosion inhibiting coating for interior of potable water tanks.
MIL-C-4556 ...	Coating kit, epoxy, for interior of steel fuel tanks	Epoxy	Gloss not under 10	S	I	Use of lining tanks for fuel oil and water (nonpotable). Use 2 to 4 coats.

¹ See code at end of table.

TABLE 6. Special Purpose Products and Uses¹ --Continued

Spec no.	Title	Type	Finish	Sub	Exp	Notes
MIL-C-15203 ..	Coating compound, bituminous, emulsion type, coal tar base	Coal tar emulsion	Black	B	E	Protective weather coat for bituminous corrosion inhibiting systems.
MIL-P-15930 ..	Primer coating, vinyl-zinc chromate (formula 120- for hot spray)	Vinyl	Primer	M	I,E	For hot spray application; usually topcoated with vinyl and vinyl alkyd finishes.
MIL-C-18480 ..	Coating compound, bituminous, solvent, coal tar base.	Coal tar	Gloss, Black ..	S	E	Use when hot applied enamel cannot be used.
MIL-P-24441 ..	Paint, epoxy-polyamide, general specification for	Epoxy	Gloss, white and 5 colors	S	I	Use for potable water tanks.
MIL-C-46081 ..	Coating compound, thermal insulating (intumescent)	Epoxy	Semigloss, White and 2 colors	M,W	I,E	Two component, prevents spread of fire, can use in wet areas.
MIL-C-81346 ..	Compound, deck covering, nonslip lightweight	.....	Rough, green ...	M	I,E	Use on metal landing mats and on tank top walkways, fire resistant.
NAVFAC-TS-15057 ...	Coal tar coating systems for steel surfaces: Type I: Enamel + primer Type II: Base coating Type III: Coupler compounds Type IV: Emulsion	Coal tar	Black	S	I,E	Instructions for use of Type I: MIL-P-15147; Type II: MIL-C-18480; Type III: Flexible for use at joints; Type IV: MIL-C-15203.

¹ See code at end of table.

TABLE 6. Special Purpose Products and Uses --Continued

Spec no.	Title	Type	Finish	Sub	Exp	Notes
NAVFAC-TS-09871 ..	Protective lining and treatment for concrete storage tanks for petroleum-fuels.	Isocyanate pre-treatment with polysulfide and polyvinylidene chloride vinyl chloride blended latex.	Tan	C	I	Used in conjunction with a fabric membrane, at least 5 coats to obtain 30 mils thickness.
VR-3	Vinyl resin paint	Vinyl	Semigloss, white Gray, aluminum	C,S	I,E	Self priming. Use 4 coats, i.e., white, gray, white, aluminum. Suitable for potable water storage.
SSPC Paint No. 5	Zinc, dust, zinc oxide and phenolic varnish paint	Phenolic	Flat, gray	M	I,E	Use on structure or galvanized steel for fresh water immersion or high humidity.
SSPC Paint No. 8	Aluminum vinyl paint	Vinyl	Metallic	M	I,E	Use for fresh water immersion and rural or industrial atmospheres. Suitable for potable water storage.
SSPC Paint No. 16.	Coal tar epoxy-polyamide paint	Coal tar + epoxy	Gloss, black, dark red	M	I,E	Two component. Hard, tough, resistant to abrasion and corrosion.
ASTM-C518	Vermiculite, loose fill insulation specification for	.....	.....	.....	.....	Use with MIL-P-15144.
NAVFAC TS-09872 ...	Coating systems, interior, welded-steel tanks (for petroleum fuel storage)	Urethane	Green	M	I	Use in conjunction with welded steel tanks

*Code
A--Asbestos insulation
B--Bituminous substrates
C--Concrete and masonry
F--Fabric, e.g., canvas
G--Galvanized steel
Code
M--Metals of all types
P--Plaster
S--Steel and iron
W--Wood
WB--Wallboard
Code
Sub--substrate
Exp--Exposure
I--Interior
E--Exterior
*--Primed or previously painted

TABLE 7. Products for Sign Painting

Spec no.	Title	Type	Finish	Notes
TT-P-98	Paint: stencil, flat	Not specified	Almost flat, 6 colors.	Ready mixed, fast drying.
MIL-P-20090 ..	Paint, stripping, brown (Formula No. 41)	Alkyd	Semigloss	Durable lettering paint.
TT-L-190	Linseed oil, boiled, (for use in organic coatings)	Oil	Mixing liquid	Add to TT-P-381 to prepare sign and stencil paints.
TT-P-381	Pigments-in-oil, tinting color	Oil	33 colors	Mix with TT-L-190 and turpentine or mineral spirits to prepare sign and stencil paints.
TT-E-489	Enamel, alkyd, gloss (for exterior and interior surface): Class A: Air drying	Alkyd	42 colors	Durable lettering paint.
MIL-P-13818 ..	Paper board, reflectorized			Use for preparation of reflectorized signs.

TABLE 8. Products for Traffic Marking

Spec no.	Title	Binder Type(s)	Finish	Substrate	Notes
TT-C-542 ...	Coating, polyurethane oil free, moisture cure: Type II: Pigmented	Urethane	Gloss, white and 4 colors	Wood, concrete brick, metal	Use for marking gym, warehouse, power plant and other industrial floors. Use on unpainted clean surfaces only. Slow drying (4 1/2 hours).
TT-P-85	Paint, traffic; reflectorized for airfield runway marking (drop-in type): Type I: Reflectorized granules Type II: Glass spheres	Not specified ..	Flat, white and yellow	Bituminous, Concrete, brick	Use not limited to airfields. Need not be reflectorized for roadways.
TT-P-110 ...	Paint, traffic black (nonreflectorized): Type I: Vinyl toluene-butadiene rubber-alkyd Type II: Chlorinated rubber-alkyd	Vinyl toluene-butadiene Chlorinated rubber-alkyd	Flat, black	Bituminous, concrete, brick, stone	General purposes non-reflective traffic paint. May be used to obliterate paint markings to permit remarking in a different manner.
TT-P-115 ...	Paint, traffic, highway, white and yellow: Type I: Alkyd Type II: Vinyl toluene-butadiene Type III: Chlorinated rubber-alkyd	Alkyd Vinyl toluene-butadiene Chlorinated rubber-alkyd	Flat, white and yellow	Bituminous, concrete, brick, stone	For general use on highways, bridges, tunnels, streets and parking lots.
TT-P-1952 ..	Paint, traffic and airfield marking, acrylic emulsion for use reflectorized or nonreflectorized.	Acrylic-latex..	Flat, white and yellow	Bituminous, concrete	For use on airfields and roadway pavements.

APPENDIX D-2. Listed by Source

Spec No.	Title
SS-P-450	Plaster, Patching, Gypsum, (Spackling)
SS-W-110	Water-Repellent, Colorless Silicone Base.
TT-C-490	Cleaning Methods and Pretreatment of Ferrous Surfaces for Organic Coatings.
TT-C-492	Coating Compound, Paint, Antisweat
TT-C-535	Coating, Epoxy, Two Component, For Interior Use on Metal, Wood, Wallboard, Painted Surfaces Concrete and Masonry.
TT-C-542	Coating, Polyurethane, Oil-Free, Moisture Curing.
TT-C-550	Coating System, Glaze, Interior, for Masonry Surfaces.
TT-C-555	Coating System, Textured (For Interior and Exterior Masonry Surfaces).
TT-C-598	Calking Compound, Oil and Resin Base Type (For Masonry and Other Structures).
TT-C-1796	Calking Compounds, Metal Seam and Wood Seam.
TT-E-485	Enamel, Semigloss, Rust-Inhibiting.
TT-E-487	Enamel, Floor and Deck.
TT-E-489	Enamel, Alkyd, Gloss (For Exterior and Interior Surfaces).
TT-E-490	Enamel, Silicone Alkyd Copolymer, Semigloss, Exterior.
TT-E-496	Enamel, Heat Resisting (400° F) Black.
TT-E-505	Enamel, Odorless, Alkyd Interior High Gloss, White and Light Tints.
TT-E-506	Enamel, Alkyd, Gloss, Tints and White (For Interior Use).
TT-E-508	Enamel, Interior, Semigloss, White and Tints.
TT-E-509	Enamel, Odorless, Alkyd, Interior Semigloss, White and Tints.
TT-E-522	Enamel, Phenolic, Lustreless, Outside.
TT-E-543	Enamel, Interior, Undercoat, Tints and White.
TT-E-545	Enamel, Odorless, Alkyd Interior Undercoat, Tints and White.
TT-E-1593	Enamel, Silicone Alkyd Copolymer, Gloss (For Exterior and Interior Use)
TT-F-336	Filler, Wood, Paste.
TT-F-340	Filler, Wood, Plastic.
TT-F-1098	Filler, Solvent Thinned, For Porous Surfaces (Concrete, Concrete Block, Stucco, etc.) (For Interior and Exterior Use).
TT-G-410	Glazing Compound, Sash (Metal) for Back Bedding and Face Glazing.
TT-L-190	Linseed Oil, Boiled (For Use in Organic Coatings).
TT-P-19	Paint, Acrylic Emulsion, Exterior.
TT-P-26	Paint, Interior, White, Tints and Black, Fire Retardant.
TT-P-28	Paint, Aluminum, Heat Resisting (1200° F).
TT-P-30	Paint, Alkyd, Odorless, Interior, Flat, White and Tints.
TT-P-34	Paint, Exterior, Fire Retardant, White and Light Tints.
TT-P-37	Paint, Alkyd Resin, Exterior Trim, Deep Colors.
TT-P-38	Paint, Aluminum, Ready-Mixed.

Spec No.	Title
TT-P-52	Paint, Oil (Alkyd-Oil) Wood Shakes and Rough Siding.
TT-P-55	Paint, Polyvinyl Acetate Emulsion, Exterior.
TT-P-57	Paint, Zinc Yellow-Iron Oxide Base, Ready Mixed.
TT-P-81	Paint, Oil; Ready Mixed, Exterior, Medium Shades.
TT-P-85	Paint, Traffic; Reflectorized for Airfield Runway Marking (Drop-In Type).
TT-P-86	Paint, Red-Lead-Base, Ready Mixed.
TT-P-91	Paint, Rubber-Base, for Interior Use (Concrete and Masonry Floors).
TT-P-95	Paint, Rubber: For Swimming Pools and Other Concrete and Masonry Surfaces.
TT-P-97	Paint, Styrene-Butadiene Solvent Type, White (For Exterior Masonry).
TT-P-98	Paint, Stencil Flat
TT-P-102	Paint, Oil Alkyd (Modified), Exterior, Fume Resistant, Ready Mixed White and Tints.
TT-P-110	Paint, Traffic Black (Nonreflectorized).
TT-P-115	Paint, Traffic, Highway White and Yellow.
TT-P-320	Pigment, Aluminum, Powder and Paste, for Paint.
TT-P-381	Pigments-In-Oil, Tinting Color.
TT-P-595	Preservative Coating, Canvas.
TT-P-615	Primer Coating: Basic Lead Silico Chromate, Ready-Mixed.
TT-P-620	Primer Coating, Conditioner for Chalking Exterior Surfaces.
TT-P-641	Primer Coating: Zinc Dust-Zinc Oxide (For Galvanized Surfaces).
TT-P-645	Primer, Paint, Zinc-Chromate, Alkyd Type.
TT-P-650	Primer Coating, Latex Base, Interior, White (For Gypsum Wallboard).
TT-P-659	Primer-Coating and Surfacer: Synthetic, Tints and White (For Metal and Wood Surfaces).
TT-P-791	Putty: Linseed Oil Type (For Wood-Sash-Glazing).
TT-P-1181	Paint, Styrene-Acrylate Solvent Type, Tints and Deep Tones (For Exterior Masonry).
TT-P-1510	Paint, Latex, Exterior, For Wood Surfaces, White and Tints.
TT-P-1511	Paint, Latex-Base, Gloss and Semigloss, Tints and White (For Interior Use).
TT-P-1728	Paint, Latex-Base, Interior, Flat, Deep tone.
TT-P-1757	Primer Coating, Zinc Chromate, Low-Moisture-Sensitivity.
TT-P-1952	Paint, Traffic and Airfield Marking, Acrylic Emulsion, For use reflectorized or nonreflectorized.
TT-P-1984	Primer Coating, Latex-Base, Exterior (Undercoat for Wood), White and Tints.
TT-R-230	Remover, Paint (Alkali-Type for Hot Application).
TT-R-243	Remover, Paint (Alkali-Organic Solvent Type).
TT-R-251	Remover, Paint (Organic Solvent Type)
TT-S-176	Sealer, Surface, Varnish Type, Floor Wood or Cork.
TT-S-179	Sealer, Surface, Pigmented Oil, Plaster and Wallboard.
TT-S-227	Sealing Compound; Elastomeric Type, Multi-Component (For Calking, Sealing, and Glazing in Building Construction and Other Structures).

Spec No.	Title
TT-S-230	Sealing Compound, Elastomeric Type, Single Component (For Calking, Sealing, and Glazing in Building Construction and Other Structures).
TT-S-708	Stain Oil: Semi-transparent, Wood, Exterior
TT-S-711	Stain, Oil Type, Wood Interior.
TT-S-1992	Stain, Latex, Exterior for Wood Surfaces.
TT-V-51	Varnish: Asphalt
TT-V-71	Varnish, Interior, Floor and Trim.
TT-V-81	Varnish; Mixing. For Aluminum Paint.
TT-V-85	Varnish, Oil, Flat, Brush or Spray.
TT-V-109	Varnish, Spar, Alkyd-Resin
TT-V-119	Varnish, Spar, Phenolic Resin
TT-W-571	Wood Preservation; Treating Practices.

MILITARY SPECIFICATIONS

DOD-E-698	Enamel, Alkyd, Deck Black, (Formula No. 24).
DOD-E-699	Enamel, Deck, Gray, Exterior (Formula No. 20).
MIL-S-2580	Signboard, Blank (for Temporary Outdoor Signs).
MIL-C-4556	Coating Kit, Epoxy, for Interior of Steel Fuel Tanks.
MIL-W-5044	Walkway Compound, Nonslip and Walkway Matting, Nonslip.
MIL-C-5541	Chemical Conversion Coatings on Aluminum and Aluminum Alloys.
MIL-C-10578	Corrosion Remover and Metal Conditioning Compound (Phosphoric Acid Base).
MIL-P-12742	Primer Coating, Phenolic, Water Immersible.
MIL-S-12935	Sealer, Surface, For Knots
MIL-P-14105	Paint, Heat Resisting, (For Steel Surfaces)
MIL-P-15144	Paint, Fire-Retardant (Binder for Anti-Sweat Coating) (Formula No. 34)
MIL-E-15145	Enamel, Zinc Dust Pigmented, Fresh Water Tank Protective, Formula No. 102.
MIL-C-15203	Coating Compound, Bituminous, Emulsion Type, Coal Tar Base.
DOD-P-15328	Primer (Wash) Pretreatment, (Formula No. 117 for Metals).
MIL-P-15929	Primer Coating, Shipboard, Vinyl--Red Lead (Formula 119--For Hot Spray).
MIL-P-15930	Primer Coating, Vinyl-Zinc Chromate (Formula 120--For Hot Spray).
DOD-E-18210	Enamel, Deck, Interior, Red, No. 23 (Formula No. 23)
DOD-E-18214	Enamel, Deck, Interior Dark Green Formula No. 19
MIL-C-18255	Calking Compound, Synthetic Rubber Base, Wooden Deck Seam Application.
MIL-C-18480	Coating Compound, Bituminous, Solvent, Coal Tar Base.
MIL-P-20090	Enamel, Alkyd, Stripping, Brown (Formula No. 41).
MIL-C-22750	Coating, Epoxy-Polyamide.
MIL-P-232~6	Paint, Coating Systems, Steel Ship Tank, Fuel and Salt Water Ballast.
MIL-P-23377	Primer Coatings, Epoxy-Polyamide Chemical and Solvent Resistant.
MIL-P-24441	Paint, Epoxy-Polyamide, General Specification for

Spec No.	Title
MIL-P-26915	Primer Coating, Zinc Dust Pigmented, For Steel Sur- faces.
MIL-P-28582	Primer Coating, Exterior, Lead Pigment-Free (Undercoat for Wood, Ready-Mix, White and Tints).
MIL-P-28641	Primer Coating, Vinyl Chloride Copolymer (High-Build) (For Steel and Masonry).
MIL-P-28642	Paint (Topcoat), Vinyl Chloride Copolymer, High-Build (for Steel and Masonry)
MIL-P-28643	Paint Latex, Interior, High Performance, White and Tints.
MIL-R-46073	Remover, Paint, Organic Solvent Type
MIL~-46081	Coating Compound, Thermal Insulating (Intumescent).
MIL-P-52192	Primer Coating, Epoxy
MIL-P-52324	Paint, Oil, Alkyd, Exterior, White and Light Tints.
MIL-C-81346	Compound, Deck Covering, Nonslip, Lightweight, for Aluminum Alloy Landing Mats
MIL-C-81706	Chemical Conversion Materials for Coating Aluminum and Aluminum Alloys.
MIL-C-81773	Coating, Polyurethane, Aliphatic, Weather-Resistant

NAVAL FACILITIES ENGINEERING COMMAND

NAVFAC-TS-09805.1 . .	Coating Systems (Coal Tar) for Sheet Steel Piling and other Steel Waterfront Structures.
NAVFAC-TS-09873 . .	Coating Systems, Exterior, Welded-Steel Tanks (For Petroleum Storage).
NAVFAC-TS-09871 . .	Protective Lining and Treatment for Concrete Storage
NAVFAC-TS-09872 . .	Coating Systems, Interior, Welded-Steel Tanks (For Petroleum Storage).
NAVFAC-TS-09910 . .	Painting of Buildings (Field Painting)
NAVFAC-TS-13657 . .	Cleaning Storage Petroleum Tanks
NAVFAC-TS-15057 . .	Coal Tar Coating Systems for Steel Surfaces.
NAVFAC-TS-15240 . .	Storage Tanks for Potable Water Use.

FEDERAL CONSTRUCTION GUIDE SPECIFICATION

Section 09806	Wall-Coating System, High Build, Glaze.
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DEPARTMENT OF THE INTERIOR

VR-3	Vinyl Resin Paint.
VR-6	Vinyl Resin Paint.

AMERICAN SOCIETY FOR TESTING AND MATERIALS

C-516	Vermiculite Loosefill Insulation, Specifications for.
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STEEL STRUCTURES PAINTING COUNCIL

SSPC Paint No. 5 . .	Zinc Dust, Zinc Oxide and Phenolic Varnish Paint.
SSPC Paint No. 8 . .	Aluminum Vinyl Paint.
SSPC Paint No. 9 . .	White (br colored) Vinyl Paint.
SSPC Paint No. 15 . .	Steel Joist Shop Paint, Type I Red Oxide Paint and Type II, Asphalt Coating
SSPC Paint No. 16 . .	Coal, Tar, Epoxy-Polyamide Paint.

Spec No.

Title

MAPLE FLOORING MANUFACTURERS ASSOCIATION

Heavy Duty Finishes for Maple, Beech and Birch Floors.

APPENDIX D-3. Numerical List

Spec No.	Title
VR-3	Vinyl Resin Paint.
SSPC Paint No. 5 .	Zinc Dust, Zinc Oxide and Phenolic Varnish Paint.
VR-6	Vinyl Resin Paint.
SSPC Paint No. 8 .	Aluminum Vinyl Paint.
SSPC Paint No, 9 .	White (for colored) Vinyl Paint.
SSPC Paint No. 15	Steel Joist Shop Paint, Type I Red Oxide Paint and Type II, Asphalt Coating.
SSPC Paint No. 16	Coal, Tar, Epoxy-Polyamide Paint.
TT-P-19	Paint, Acrylic Emulsion, Exterior.
TT-P-26	Paint, Interior, White, and Tints, Fire Retardant.
TT-P-28	Paint, Aluminum, Heat Resisting (1200° F).
TT-P-29	Paint, Latex 'Base, Interior, Flat, White and Tints.
TT-P-30	Paint, Alkyd, Odorless, Interior, Flat, White and Tints.
TT-P-34	Paint, Exterior, Fire Retardant, White and Light Tints.
TT-P-37	Paint, Alkyd Resin, Exterior Trim, Deep Colors.
TT-P-38	Paint, Aluminum, Ready-Mixed.
TT-P-52	Paint, Oil (Alkyd-Oil) Wood Shakes and Rough Siding.
TT-P-55	Paint, Polyvinyl Acetate Emulsion, Exterior.
TT-V-71	Varnish, Interior, Floor and Trim.
TT-P-81	Paint, Oil; Ready Mixed, Exterior, Medium Shades on a Lead-Zinc Base.
TT-V-81	Varnish; Mixing. For Aluminum Paint.
TT-P-85	Paint, Traffic; Reflectorized for Airfield Runway Marking (Drop-in Type).
TT-V-85	Varnish, Oil, Flat, Brush or Spray.
TT-P-86	Paint, Red-Lead-Base, Ready-Mixed.
TT-P-91	Paint, Rubber-Base, for Concrete Floors.
TT-P-95	Paint, Rubber; For Swimming Pools and Other Concrete and Masonry Surfaces.
TT-P-97	Paint, Styrene-Butadiene Solvent Type, White (For Exterior Masonry).
TT-P-98	Paint, Stencil Flat
TT-P-102	Paint, Oil Alkyd (Modified), Exterior, Fume Resistant, Ready Mixed, White and Tints.
TT-V-109	Varnish, Spar, Alkyd-Resin
SS-W-110	Water-Repellent, Colorless Silicone Resin Base.
TT-P-110	Paint, Traffic Black (Nonreflectorized).
TT-P-115	Paint, Traffic, Highway White and Yellow.
TT-V-119	Varnish, Spar, Phenolic Resin
TT-S-176	Sealer, Surface, Varnish Type, Floor, Wood or Cork.
TT-S-179	Sealer, Surface, Pigmented Oil, Plaster and Wallboard.
TT-L-190	Linseed Oil, Boiled (For Use in Organic Coatings).
TT-S-227	Sealing Compound; Elastomeric Type, Multi-component (For Calking, Sealing, and Glazing in Building Construction and Other Structures).
TT-R-230	Remover, Paint (Alkali-Type for Rot Application).
TT-S-230	Sealing Compound, Elastomeric Type, Single component (For Calking, Sealing, and Glazing in Buildings and Other Structures).
TT-R-243	Remover, Paint (Alkali-Organic Solvent Type).

Spec No.	Title
TT-R-251	Remover, Paint (Organic Solvent Type)
TT-F-336	Filler, Wood, Paste.
TT-F-340	Filler, Wood, Plastic.
TT-P-381	Pigments-In-Oil, Tinting Color.
TT-G-410	Glazing Compound, Sash (Metal) for Back Bedding and Face Glazing.
SS-P-450	Plaster, Patching, Gypsum, (Spackling)
TT-E-485	Enamel, Semi-loss, Rust-Inhibiting.
TT-E-487	Enamel, Floor and Deck.
TT-E-489	Enamel, Alkyd, Gloss (For Exterior and Interior Surfaces).
TT~-490	Cleaning Methods and Pretreatment of Ferrous Surfaces for Organic Coatings.
TT-E-490	Enamel, Silicone Alkyd Copolymer, SemiGloss, Exterior.
TT-C-492	Coating Compound, Paint, Antisweat
TT-E-496	Enamel, Heat Resisting (400° F) Black.
TT-E-505	Enamel, Odorless, Alkyd Interior High Gloss, White and Tints.
TT-E-506	Enamel, Alkyd, Gloss, Tints and White (For Interior Use).
TT-E-508	Enamel, Interior, Semigloss, White and Tints.
TT-E-509	Enamel, Odorless, Alkyd, Interior Semigloss, White and Tints.
ASTM C516	Vermiculate, Loose Fill Insulation, Specification for
TT-E-522	Enamel, Phenolic, Lustreless, Outside.
TT-C-535	Coating, Epoxy, Two-Component, For interior use on Metal, Wood, Wallboard, Painted Surfaces Concrete and Masonry.
TT-C-542	Coating, Polyurethane, Oil-Free, Moisture Curing.
TT-E-543	Enamel, Interior, Undercoat, Tints and White.
TT-E-545	Enamel, Odorless, Alkyd Interior Undercoat, Tints and White.
TT-C-550	Coating System, Glaze, Interior, for Masonry Surfaces.
TT-C-555	Coating System, Textured (For Interior and Exterior Masonry Surfaces).
TT-W-571	Wood Preservation; Treating Practices.
TT-P-595	Preservative Coating, Canvas.
TT-C-598	Calking Compound, Oil and Resin Base Type (For Masonry and Other Structures).
TT-P-615	Primer Coating: Basic Lead Silico Chromate, Ready-Mixed.
TT-P-620	Primer Coating, Conditioner for Chalking Exterior Surfaces.
TT-P-641	Primer Coating: Zinc Dust-Zinc Oxide (For Galvanized Surfaces).
TT-P-645	Primer, Paint, Zinc-Chromate, Alkyd Type.
TT-P-650	Primer Coating, Latex Base, Interior, White (For Gypsum Wallboard).
TT-P-659	Primer-Coating and Surfacer, Synthetic, Tints and White (For Metal and Wood Surfaces).
DOD-E-698	Enamel, Alkyd, Deck, Black. (Formula No. 24)
DOD-E-699	Enamel, Deck, Gray, Exterior (Formula No. 20)

Spec No.	Title
TT-S-711	Stain, Oil Type, Wood, Interior.
TT-P-791	Putty: Pure-Linseed Oil Type (For Wood-Sash-Glazing).
TT-F-1098	Filler, Solvent Thinned, For Porous Surfaces (Concrete, Concrete Block, Stucco, etc.) (For Interior and Exterior Use).
TT-P-1181	Paint, Styrene-Acrylate Solvent Type, Tints and Deep Tones (For Exterior Masonry).
TT-P-1510	Paint, Latex Interior, For Wood Surfaces, White and Tints.
TT-P-1511	Paint, Latex-Base, Gloss and Semigloss, Tints and White (For Interior Use).
TT-E-1593	Enamel, Silicone Alkyd Copolymer, Gloss (For Exterior and Interior Use)
TT-P-1728	Paint, Latex-Base, Interior, Flat, Deep tone.
TT-P-1757	Primer Coating, Zinc Chromate, Low-Moisture-Sensitivity.
TT-C-1796	Calking Compound, Metal Seam and Wood Seam.
TT-P-1952	Paint, Traffic and Airfield Marking, Acrylic Emulsion, For use reflectorized or nonreflectorized.
MIL-S-2580	Signboard, Blank (for Temporary Outdoor Signs).
MIL-C-4556	Coating Kit, Epoxy, for Interior of Steel Fuel Tanks.
MIL-W-5044	Walkway Compound, Nonslip and Walkway Matting, Nonslip.
MIL-C-5541	Chemical Conversion Coatings on Aluminum and Aluminum Alloys.
NAVFAC-TS-09805.1	Coating Systems (Coal Tar) for Sheet Steel Piling and other Steel Waterfront Structures.
NAVFAC-TS-09873	Coating Systems, Exterior, Welded-Steel Tanks (For Petroleum Storage).
NAVFAC-TS-09871	Protective Lining and Treatment for Concrete Storage Tanks for Petroleum Fuels.
NAVFAC-TS-09872	Coating Systems, Interior, Welded-Steel Tanks (For Petroleum Storage).
NAVFAC-TS-09910	Painting of Buildings (Field Painting).
MIL-P-10578	Corrosion Remover and Metal Conditioning Compound (Phosphoric Acid Base).
MIL-P-12742	Primer Coating, Phenolic, Water Immersible.
MIL-S-12935	Sealer, Surfaces, For Knots.
MIL-P-14105	Paint, Heat Resisting, (For Steel Surfaces)
NAVFAC-TS-15057	Coal Tar Coating Systems for Steel Surfaces.
MIL-P-15144	Paint, Fire-Retardant (Binder for Anti-Sweat Coating) (Formula No. 34).
MIL-E-15145	Enamel, Zinc Dust Pigmented, Fresh Water Tank Protective, Formula No. 102.
MIL-V-15196	Vermiculite, Expanded (Pigment).
MIL-C-15203	Coating Compound, Bituminous, Emulsion Type, Coal Tar Base.
DOD-P-15328	Primer (Wash) Pretreatment, (Formula No. 117 for Metals).
MIL-P-15929	Primer Coating, Shipboard, Vinyl, Red Lead (Formula 119 For Hot Spray).
MIL-P-15930	Primer Coating, Vinyl-Zinc Chromate Type (Formula 120 For Hot Spray).
DOD-E-18210	Enamel, Deck, Interior, Red, No. 23 (Formula No. 23).

Spec No.	Title
DOD-E-18214	Enamel, Deck, Interior, Dark Green (Formula No. 19).
MIL-C-18255	Calking Compound Synthetic Rubber Base, Wooden Deck Seam Application.
MIL-C-18480	Coating Compound Bituminous, Solvent, Coal Tar Base.
MIL-E-20090	Enamel, Alkyd, Stripping, Brown (Formula No. 41).
MIL-C-22750	Coating, Epoxy-Polyamide.
MIL-P-23236	Paint, Coating Systems, Steel Ship Tank, Fuel and Salt Water Ballast.
MIL-P-23377	Primer Coatings, Epoxy-Polyamide Chemical and Solvent Resistant.
MIL-P-24441	Paint, Epoxy-Polyamide, General Specification for
MIL-P-26915	Primer Coating, Zinc Dust Pigmented, For Steel Sur- faces.
MIL-P-28582	Primer Coating, Exterior, Lead Pigment-Free (Under- coat, for Wood, Ready-Mixed, White and Tints).
MIL-P-28641	Primer Coating, Vinyl Chloride Copolymer (High Build) (For Steel and Masonry).
MIL-P-28642	Paint (Topcoat), Vinyl Chloride Copolymer, High Build (for Steel and Masonry).
MIL-R-46073	Remover, Paint, Organic Solvent Type.
MIL-C-46081	Coating Compound, Thermal Insulating (Intumescent).
MIL-P-52192	Primer Coating, Epoxy.
MIL-P-52324	Paint, Oil, Alkyd, Exterior, White and Light Tints.
MIL~-81346	Compound, Deck Covering, Nonslip, Lightweight, for Aluminum Alloy Landing Mats.
MIL-C-81706	Chemical Conversion Materials for Coating Aluminum and Aluminum Alloys.
MIL-C-81773	Coating, Polyurethane, Aliphatic, Weather Resistant.

APPENDIX D-4. Recommended Coating Systems*

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*Compatibility criteria (see 6.3.11) should be used when selecting recommended coating systems from the following tables.

TABLE 9. Recommended Coating Systems for Interior Wood

Use	Finish	Binder type(s)	Primer	Topcoat*	Notes
General Purpose ..	Clear	Oleo.....	TT-V-85	TT-V-85	Flat finish.
		Alkyd	TT-V-109	TT-V-109	Gloss finish, good film clarity.
		Urethane	TT-C-540	TT-C-540	Tough, durable gloss finish, but less film clarity than TT-V-109.
Stain	Oil	TT-S-711	Any of above		
		Semigloss	Alkyd	TT-E-508	White and tints.
Gloss	Alkyd + latex ...	TT-E-543	TT-P-1511	Type I: White and tints.	
		TT-E-543	TT-E-506	White and tints.	
Odorless	Semigloss	TT-E-543	TT-E-489	Wide range of colors, fast dry.	
		Gloss	Alkyd + latex ...	TT-P-1511	Type II: White and tints.
Heavy duty	Clear	Alkyd	TT-E-545	White and tints.	
		Urethane	TT-E-545	White and tints.	
Gloss	Phenolic	Urethane	TT-C-542	TT-C-542	Do not use below 30% relative humidity.
		Epoxy	TT-V-119	TT-V-119	Do not use on light colored wood--tends to yellow.
Gloss	Urethane	TT-C-535	TT-C-535	TT-C-535	Two component--limited pot life. White and tints.
		TT-C-542	TT-C-542	TT-C-542	Do not use below 30% humidity. Five colors.
Gloss	Not specified	TT-C-550	TT-C-550	TT-C-550	Tile-like surface, white and colors. All components must be compatible and from the same manufacturer (See FCGS 09806).

*1 or 2 coats as required.

TABLE 10. Recommended Coating Systems for Interior Concrete and Masonry

Use	Finish	Binder Type(s)	Primer*	Topcoat*	Notes
General Purpose ..	Flat	Latex + alkyd ...	TT-P-29	TT-P-30	White and tints.
		Latex	TT-P-29	TT-P-29	White and Tints
		Latex	TT-P-29 or ... TT-P-1728	TT-P-1728	TT-P-1728 .....	Deep tones.
Odorless	Semigloss	Latex + alkyd ...	TT-P-29	TT-E-508	White and tints.
		Latex + latex ...	TT-P-29	TT-P-1511	Type I: white and tints.
		Latex + alkyd ...	TT-P-29	TT-E-506a	White and tints.
Moisture Resistant	Gloss	Latex + latex ...	TT-P-29	TT-P-1511	Type II: white and tints.
		Latex + alkyd ...	TT-P-29	TT-P-30	White and tints.
		Latex + alkyd ...	TT-P-29	TT-P-29	White and tints.
Moderately Heavy Duty	Flat	Latex + alkyd ...	TT-P-29	TT-E-508b	White and tints.
		Latex	TT-P-29	TT-E-506b	White and tints.
		Latex + alkyd ...	TT-P-29	TT-P-95	Class 3, white and tints.
Heavy Duty	Gloss	Rubber	TT-P-95	TT-P-95	Class 2, white and tints.
		Rubber	TT-P-95	TT-P-95	Class 1, white and tints.
		Rubber	TT-P-95	MIL-P-28643 ...	MIL-P-28643 ...	White and tints for family housing
Heavy Duty	Gloss	Epoxy	TT-C-535	TT-C-535	Two component, limited pot life. White and tints.
		Urethane	TT-C-542	TT-C-542	Do not use below 30% relative humidity. Wide range of colors.
		Not specified ...	TT-C-550**	TT-C-550**	TT-C-550** .....	Tile-like surface. White and colors. All components must be compatible and from the same manufacturer (See FCGS 09806).
Heavy Duty	Flat, textured	Not specified ...	TT-C-555	TT-C-555	Type I: Used to hide surface irregularities on ceilings.
		Not specified ...	TT-C-555	TT-C-555	Type I: Used to hide surface irregularities on ceilings.

* Note: Use block filler if a smooth finish is desired on a rough substrate before applying primer.

** 1 or 2 coats are required.

a Apply 1 intermediate coat of TT-E-543 and 1 top coat of enamel.

b Apply 1 intermediate coat of TT-E-545 and 1 top coat of enamel.

TABLE 11. Recommended Coating Systems for Interior Metal

Use	Finish	Binder Type(s)	Primer*	Topcoat*	Notes
General purposes	Semigloss	Alkyd	TT-P-645	TT-E-508*	White and tints.
	Gloss	Alkyd	TT-P-645	TT-E-506 ^a	White and tints.
	Gloss	Alkyd	TT-P-645	TT-E-489b	White and colors.
	Aluminum	Alkyd + phenolic.	TT-P-645	TT-P-38	Ready-mixed.
Odorless	Semigloss	Alkyd	TT-E-509b	TT-E-509b	White and tints.
	Gloss	Alkyd	TT-P-645	TT-E-505b	White and tints.
Moisture Resistant	Semigloss	Rubber	TT-P-1046	TT-P-95***	Class 2, white and tints.
	Gloss	Rubber	TT-P-1046	TT-P-95***	Class 1, white and tints.
Heavy Duty	Gloss	Epoxy	**	TT-C-535	Two component, limited pot life. White and tints.
	Gloss	Urethane	**	TT-C-542	Do not use below 30% relative humidity. Wide range of colors.
Aluminum finish	Oleo. + phenolic	Oleo. + phenolic	TT-P-659	TT-P-38	Ready mixed.
	Oleoresinous	Oleoresinous	TT-P-659	TT-P-320, + TT-V-81	2 lbs per gallon mixed just before use.

*Use pretreatment DOD-P-15328 on nonferrous metals.

**1 or 2 coats as required.

***2 or 3 coats as required.

^aApply 1 intermediate coat of TT-E-543 and 1 top coat of enamel.

^bApply 1 intermediate coat of TT-E-545 and 1 top coat of enamel.

TABLE 12. Recommended Coating Systems for Interior Plaster and Wallboard

Use	Finish	Binder Type(s)	Primer Plaster	Primer Wallboard	Topcoat*	Notes
General purpose ..	Flat	Latex.....	TT-P-29	TT-P-650**	TT-P-29	White and tints.
			MIL-P-28643 ...	TT-P-650	MIL-P-28643 ..	White and tints for moderately heavy duty.
	Semigloss	*** + alkyd ...	TT-S-179	TT-P-650**	TT-P-1728	Deep tones.
Gloss	*** + latex ...	*** + alkyd ...	TT-S-179	TT-P-650**	TT-E-508 ^a ...	White and tints.
			TT-S-179	TT-P-650**	TT-P-1511	Type I: White and tints.
Odorless	Flat	Latex	TT-S-179	TT-P-650**	TT-P-506 ^a ...	White and tints.
			TT-S-179	TT-P-650**	TT-P-1511	Type II: White and tints.
Moisture resistant	Flat	Rubber	TT-P-29	TT-P-650**	TT-P-29	White and tints.
			TT-S-179	TT-P-650**	TT-P-30	White and tints.
			TT-S-179	TT-P-650**	TT-E-509 ^b ...	White and tints.
Semigloss	Rubber	Rubber	TT-S-179	TT-P-650**	TT-E-505 ^b ...	White and tints.
			TT-P-95c.....	TT-P-95c.....	TT-P-95	Class 3, white and tints.
Gloss	Rubber	Rubber	TT-P-95c.....	TT-P-95c.....	TT-P-95	Class 2, white and tints.
			TT-P-95c.....	TT-P-95c.....	TT-P-95	Class 1, white and tints.

*1 or 2 coats as required.
 **TT-P-29 may be substituted.
 ***Primer for plaster-oil or wallboard-latex
^aApply 1 intermediate coat of TT-E-543 and 1 top coat of enamel.
^bApply 1 intermediate coat of TT-E-545 and 1 top coat of enamel.
^cUse Class 3, flat, for prime coat.

TABLE 13. Recommended Coating Systems for Exterior Wood

Use	Finish	Binder Type(s)	Primer*	Topcoat*	Notes
General purpose ..	Flat	Alkyd + latex ...	MIL-P-28582**..	TT-P-19	White and colors.
	Flat	Alkyd + alkyd-latex	MIL-P-28582 ...	TT-P-1510	White and colors.
	Gloss	Alkyd + oil	MIL-P-28582 ...	TT-P-81	Medium shades.
	.....	.....	MIL-P-28582 ...	MIL-P-52324	Blister resistant, white and tints.
Trim paint .....	.....	Alkyd + alkyd	MIL-P-28582 ...	TT-P-102	Lead free, white and tints.
	Gloss	Alkyd + alkyd	MIL-P-28582 ...	TT-P-37	Deep colors.
Shakes and Shingles	Flat	Oil	TT-S-708	TT-S-708	Semitransparent colors.
	.....	Latex	TT-S-1992	TT-S-1992	Wide range of colors.
	Semigloss	Alkyd-oil	TT-P-52	TT-P-52	White and colors.
Plywood .....	.....	Latex	TT-P-1984	TT-P-19	First seal with TT-S-176.
	.....	Latex + Alkyd-latex	.....	TT-P-1510***	White and colors.
	.....	Latex	TT-S-1992	TT-S-1992	Wide range of colors. For previously stained surfaces use TT-S-1992.
Industrial areas ..	Gloss	Alkyd	MIL-P-28582 ...	TT-P-102	Lead free. White and tints.
	.....	Alkyd	MIL-P-28582 ...	MIL-P-52324	Lead free. White and tints.

*1 or 2 coats as required.

**Use TT-P-1984 as the primer for an all latex system.

***For better adhesion to previously painted surfaces, use TT-P-1510 as a latex topcoat.

TABLE 14. Recommended Coating Systems for Exterior Concrete and Masonry

Use	Finish	Binder Type(s)	Primer***	Topcoat*	Notes
General purpose ...	Flat	Latex (acrylic) ...	TT-P-19**	TT-P-19	White and colors. Resistant to chalking and fading.
	.....	Latex (PVAc)	TT-P-55**	TT-P-55	Type II: White and colors. Resistant to chalking and fading.
	.....	Rubber	TT-P-97	TT-P-97	White, solvent thinned.
High humidity and Moisture	Gloss .....	.....	TT-P-1181	TT-P-1181	Colors, solvent thinned.
	.....	Rubber	TT-P-95****	TT-P-95	Class 1, White and tints. Can be used for swimming pools.
	Semigloss	Rubber	TT-P-95****	TT-P-95	Class 2, White and tints. Can be used for swimming pools.
Flat .....	.....	Vinyl	MIL-P-28641 ...	MIL-P-28642	High build vinyl.
	.....	Rubber	TT-P-95****	TT-P-95	Class 3, White and tints. Can be used for swimming pools.
	Textured finish ...	Not specified	TT-F-1098	TT-C-555	Type II: Heavy bodied coating that can hide surface irregularities.
Corrosive environment (bulkhead, etc.)	Semigloss	Vinyl	VR-3	VR-3	Use 4 coats for best performance. 4 colors.

*1 or 2 coats as required.
 **Use fill coats if necessary. See specification.
 ***Use TT-P-620 on prepared chalky surfaces.
 ****Use Class 3 for prime coat.

TABLE 15. Recommended Coating Systems for Exterior Iron and Steel

Environment	Substrate	Preparation*	Binder Type(s)	Primer	Topcoat**	Notes
Rural	Structural	Class 1	Oi alkyd+alkyd ...	TT-P-86, Type II	TT-P-102 ...	White and tints.
	(rough)			TT-P-86, Type II	MIL-P-52324.	White and tints.
				TT-P-86, Type II	TT-P-81	Medium colors.
			Oi alkyd+alkyd ..	TT-P-57, Type I	TT-P-81	Deep colors.
			Oil-alkyd+phenolic	TT-P-57, Type I	TT-P-38	Aluminum, ready mixed.
	Smooth	Class 3	Alkyd+alkyd	TT-P-57, Type II, or	TT-E-489 ...	High gloss, all colors.*****
				TT-P-86, Type II, or	TT-E-490 ...	Semigloss, very durable silicone-alkyd, white and 12 colors.
			Oil silicone-alkyd	TT-P-645	TT-E-1593 ..	Gloss, durable silicone-alkyd white and 19 colors.*****
					MIL-P-28577 .	White and tints.
Sulfide fumes .	Structural	Class 1	Latex	MIL-P-28577 .	TT-P-102 ...	White and tints.
			Oil+oil	TT-P-86, Type I		
High humidity or heavy rainfall	Structural	Class 3	Phenolic+alkyd	TT-P-57, Type III or	TT-E-489 ...	Alkyd enamel, all colors.*****
	or smooth		Phenolic+silicone-alkyd	TT-P-1757	TT-E-490 ...	Semigloss
			Phenolic+chlorinated rubber		TT-E-1593 TT-P-95, Type I	Gloss Rubber base, white and tints.

TABLE 15. Recommended Coating Systems for Exterior Iron and Steel--Continued

Environment	Substrate	Preparation*	Binder Type(s)	Primer	Topcoat**	Notes
Fresh water immersion			Vinyl	SSPC Paint No. 9 or VR-3 MIL-P-24441/1	SSPC Paint No. 9 or VR-3 MIL-P-24441/7+/3	Aluminum white, 4 coat systems 4 coat systems
Marine or mildly corrosive	Structural	Class 2 or 3	Same as rural	See rural but use 2 coats of primer.	Same as rural	
	Smooth	Class 3	Same as rural			
Marine or moderately corrosive	Structural	Class 3	Vinyl	MIL-P-28461 . TT-P-641, Type II or III	MIL-P-28462 . TT-E-490 ... TT-E-1593 ..	High build vinyl Semigloss, very durable silicone-alkyd, white and 13 colors.***** Gloss, very durable silicone-alkyd, white and 19 colors. Gloss, durable silicone-alkyd, white and 11 colors.*****
	Smooth	Class 3	alkyd or phenolic+ silicone-alkyd			
Marine	Structural	Class 4	Vinyl	VR-3, 4 coat system		See Appendix D-1, Table 4.
Immersion or highly corrosive			Vinyl	VR-6, 4 coat system		See Appendix D-1, Table 4.
			Inorganic Zinc+vinyl Class 3	MIL-P-23236, Class 3		
			Epoxy+Urethane	MIL-P-23377	MIL-C-81773	Processed in accordance with MIL-C-81907.

*See 4.4.2.7

**Use 2 coats on new work, then 1 or 2 coats as required.

***Tie coat may be required.

****See Appendix D-1, Table 4 for other gray enamels of similar formulation.

*****Suitable for use as colors in obstruction markings.

APPENDIX D-4

TABLE 15a--Estimated Dry Film Thickness of Recommended Coating Systems for Exterior Iron and Steel*

This table has been prepared to provide information on the dry film thicknesses of the primer topcoat systems listed in Table 15, Appendix D-4 (See also 8.4.1.4.)

This table shows the estimated dry film thickness for one primer coat and one topcoat in each system. It also shows the total estimated film thickness of each recommended system consisting of one primer coat and two topcoats. Thus, a user who may have film thickness requirements different from those provided by the conventional systems has the information necessary to make a change.

Primer	Dry film thickness (mils)	Top Coat	Dry film thickness (mils)	Total dry film thickness (1 primer and 2 topcoats) (mils)
TT-P-86 Type II	1.9	MIL-P-52324	2.1	6.1
TT-P-86 Type II	1.9	TT-P-81	2.1	6.1
TT-P-57 Type I	1.5	TT-P-37	1.6	4.7
TT-P-57 Type I	1.5	TT-P-38	1.5	4.4
TT-P-57 Type II	1.5	TT-E-489	1.0	3.5
TT-P-86 Type II	1.9	TT-E-490	1.3	4.5
TT-P-645	1.3	TT-E-490	1.3	3.9
TT-P-57 Type II	1.5	TT-E-1593	1.1	3.7
TT-P-86 Type II	1.9	Tt-E-1593	1.1	4.1
TT-P-645	1,3	TT-E-1593	1.1	3.5
MIL-P-28577 (2 coats)	6.0	MIL-P-28578	3.0 (1 coat)	9.0

*See footnote at end of table.

TABLE 15a--Estimated Dry Film Thickness of Recommended Coating systems for Exterior Iron and Steel--Continued

Primer	Dry film thickness (mils)	Top Coat	Dry film thickness (mils)	Total dry film thickness (1 primer and 2 topcoats) (mils)
TT-P-86 Type I	2.4	TT-P-102	2.2	6.8
TT-P-57 Type III	1.5	TT-E-489	1.0	3.5
TT-P-57 Type III	1.5	TT-E-490	1.3	4.1
TT-P-1757	3.0	TT-E-490	1.3	5.6
TT-P-1757	3.0	TT-E-1593	1.1	5.2
TT-P-57 Type III	1.5	TT-P-95	1.2	3.9
TT-P-1757	3.0	TT-P-95	1.2	5.4
SSPC Paint No. 9	1.5	SSPC Paint No. 9	1.5	6.0 (4 coat system)
MIL-P-28461	5.0	MIL-P-28462	5.0	10.0 (2 coat system)
TT-P-641 Type III	1.5	TT-E-490	1.3	4.1
TT-P-641 Type II	1.3	TT-E-1593	1.1	3.5
TT-P-641 Type III	1.5	TT-E-1593	1.1	3.7

*See footnote at end of table.

TABLE 15a--Estimated Dry Film Thickness of Recommended Coating systems for Exterior Iron and Steel--Continued

Primer	Dry film thickness (mils)	Top Coat	Dry film thickness (mils)	Total dry film thickness (1 primer and 2 topcoats) (mils)
VR-3	1.5	VR-3	1.5	6.0 (4 coat system)
VR-6		VR-6		10 min.** (6 coat system)
MIL-P-23236 Type III	3.5	VR-3	1.5	6.5
MIL-P-23377	3.5	VR-3	1.5	6.5

* The figures given for film thickness have been arrive at in two ways. In the simplest case the specification itself contains a statement of film thickness, and this figure has been accepted as valid. In most instances, however, it has been necessary to compute film thickness from spreading rate and volume composition data. since the intended spreading rate of the paint is not always stated and the volume composition can vary legitimately under the specification, it has been necessary to make certain assumptions in order to calculate dry film thickness. To avoid complicating the table unduly, a single color, usually medium gray, has been chosen to represent the gamut of paint colors covered by some specifications.

For these reasons, the figures given should be regarded as estimates rather than as exact values. They should nevertheless be adequate for and provide useful guidance to those who are concerned with the film thickness problem.

** System consists of one priming coat, three body coats, and two seal costs.

TABLE 16. Recommended Systems for Exterior Metal (Non-Ferrous and Misc.)

Substrates	Preparation	Pretreatment*	Primer	Top coat**	Notes
Aluminum	Clean and deoxidize per ASTM B 449; or abrade with MIL-A-9962 abrasive mats and solvent clean	MIL-C-81706 Class 1A	TT-P-645	Same as for iron and steel depending on environment and desired finish	Generally not painted, Select appropriate clear finish to prevent staining, e.g., Inctalac, International Copper Research Assn., Inc.
Copper and copper alloys, including brass	Solvent clean as per TT-C-490, method 2	MIL-P-15328	TT-P-645	Same as for iron and steel depending on environment and desired finish.	Generally not painted. Select appropriate clear finish to prevent staining, e.g., Inctalac, International Copper Research Assn., Inc. Patina may be removed if desired by TT-C-490, method 1 and MIL-M-10518, type I.
Lead	Solvent clean, if new; otherwise class 1	MIL-P-15328	TT-P-645	As above	Generally not painted.
Tin, andterne	Solvent clean, if new, otherwise, class 1	MIL-P-15328	TT-P-645	As above	Generally not painted.
Miscellaneous metal finishes (special purpose)	. . . . .	. . . . .	. . . . .	. . . . .	See MIL-STD-171, and MIL-HDBK-132 for preparation, pretreatment and coating.
Galvanized steel	As above	As above	TT-P-641***	As above	Two coats should be adequate for rural environment.
Chain link fencing	Class 1			TT-P-641.. MIL-P-21035 TT-P-38 ..	Gray finish Gray finish Aluminum finish
Screen and wire cloth	. . . . .			TT-V-119 ... TT-E-489 .	Clear finish Black enamel

*See 4.4.4.3
 **Use 2 coats on new work, then 1 or 2 coats as required.
 ***Can be used without pretreatment

TABLE 17. Recommended Coating Systems for Wood Floors*

Use	Finish	Binder type(s)	Exposure	Primer	Top coat*	Notes
General Purpose	Clear	Oleoresinous	Interior	TT-S-176 ..	TT-S-176 ..	Penetrating sealer, low gloss finish.
	Gloss	Not specified	Interior or exterior	TT-E-487 ..	TT-E-487 ..	Eight colors, not for damp areas.
Humid, marine	Clear	Phenolic	Interior	TT-S-176 ..	TT-V-119 ..	Excellent water resistance.
	Semigloss	Alkyd-phenolic	Interior	DOD-E-698	DOD-E-698	Black.
			or exterior	DOD-E-699	DOD-E-699	Gray.
				DOD-E-18210	DOD-E-18210	Red.
	Not specified	Alkyd	Interior	DOD-E-18214	DOD-E-18214	Dark green.
Heavy duty	Clear	Urethane	Interior	TT-C-542, Type I, Class I.	TT-C-542, Type I, Class I.	Slow dry at low humidity, excellent abrasion and chemical resistance.
	Clear	Not specified	Interior	TT-S-176 ..	MFMA**	For gymnasium floors.
Non-skid	Rough	Urethane	Interior	TT-C-542, Type II.	TT-C-542, Type II.	Add abrasive chips for nonskid paint.

*If a filler is used prior to primer/top coat application, make sure that the filler is cured and that it is compatible with the primer/top coat. Use 2 coats on new work.

**Heavy duty finishes for maple, beech, and birch floors--Maple Flooring Mfrs. Assoc.

TABLE 18. Recommended Coating Systems for Coating Floors*

Use	Finish	Type	Exposure	Primer	Top coat	Notes
General purpose	Gloss	Not specified	Interior or exterior ..	TT-E-487 ..	TT-E-487 ..	Four colors, not for damp areas.
		Rubber	Interior	TT-P-91 ...	TT-P-91 ...	Eight colors, fast dry, resistant to cleaners, mild acid and alkali, abrasion.
Heavy duty and nonskid	Rough	Urethane	Interior	TT-C-542, Type II.	TT-C-542, Type II.	Slow dry at low humidity, excellent abrasion and chemical resistance. Add abrasion chips for nonskid paint.
Damp environments	Rough	Coal tar-epoxy	Interior	SSPC no. 16	SSPC no. 16	Two component; black and dark red; apply on dry substrate. Use with garnet. Modeled after C or E Formula C-200.

*Concrete floors shall not be painted except as necessary for functional needs, e.g., safety, special illumination.

TABLE 19. Recommended Coating Systems for Metal Floors

Use	Finish	Binder Type(s)	Exposure	Primer	Top coat*	Notes
General purpose **	Semigloss	Alkyd	Interior	TT-E-485	TT-E-485 ...	Type II Roller.
	Not specified	Alkyd+alkyd-phenolic	Interior	TT-P-57, Type II or TT-P-86	DOD-P-18210 DOD-E-18214 DOD-E-698 .. DOD-E-699 ..	Red. Dark green Black Gray.
	Semigloss		Interior or Exterior	Type III		
	Not specified	Not specified			Type I	
Damp and mildly corrosive environments	Smooth	Not specified	Interior or Exterior	TT-P-615, Type IV	MIL-W-5044 Type I	6 colors, for walkways
	Not specified	Urethane	Interior	TT-C-542 Type II	TT-C-542, Type II.	Slow dry at low humidity, 4 colors, excellent abrasion and chemical resistance.
Corrosive environments	Rough	Coal tar-epoxy ...	Interior	SSPC No. 16		Two component; Black and dark red. Use with garnet. Modeled after C of E Formula C-200.
	Rough	Phenolic	Interior	TT-P-57, Type III or TT-C-542, Type II	MIL-W-5044, Type II	6 colors, for walkways.
Nonskid	Rough	Urethane	Interior	TT-C-542, Type II	TT-C-542, Type II	With abrasive chips added, 4 colors.

*Use 2 coats on new work.

**For damp and mildly corrosive environments, use TT-P-57, type III, or TT-P-86, type IV, or TT-P-615, type III for primers.